

Amendments to the Claims:

Claims 1-15 (canceled).

16(new). A probe station comprising:

- (a) a chuck assembly for supporting a test device;
- (b) a probe support for supporting a probe;
- (c) a positioning mechanism enabling at least one of said probe support and said chuck assembly to move relative to the other;
- (d) said chuck assembly including at least two electrically conductive chuck assembly elements with a gap separating said elements from each other, at least a major volume of said gap being filled with air; and
- (e) said probe station including an electrically-conductive enclosure at least partially enclosing said chuck assembly, said elements being separated by respective electrical insulation members from each other and from said conductive enclosure.

17(new). A probe station comprising:

- (a) a chuck assembly for supporting a test device;
- (b) a probe support for supporting a probe;
- (c) a positioning mechanism enabling at least one of said probe support and said chuck assembly to move relative to the other;
- (d) said chuck assembly including at least two electrically conductive chuck assembly elements with a gap separating said elements from each other, at least a major volume of said gap being filled with air; and
- (e) said probe station including an electrically-conductive enclosure at least partially enclosing said chuck assembly, said elements being electrically insulated from each other and from said conductive enclosure.

18(new). A probe station comprising:

- (a) a chuck assembly for supporting a test device;
- (b) a probe support for supporting a probe;

- (c) a positioning mechanism enabling at least one of said probe support and said chuck assembly to move relative to the other;
- (d) said chuck assembly including at least two electrically conductive chuck assembly elements, at least one of said elements including an electrically conductive member extending toward the other of said elements in spaced-apart relationship thereto;
- (e) said probe station including an electrically conductive environment control enclosure mounted thereon having a wall portion in spaced-apart relationship to said other of said elements with said electrically conductive member located therebetween, and defining a controlled-environment region in communication with a surface area on said other of said elements, said elements being separated by respective electrical insulation members from each other and from said conductive enclosure; and
- (f) said chuck assembly being movable relative to said wall portion of said enclosure while a constant spacing is maintained between said electrically conductive member and said other of said elements.

19(new). A probe station comprising:

- (a) a chuck assembly for supporting a test device;
- (b) a probe support for supporting a probe;
- (c) a positioning mechanism enabling at least one of said probe support and said chuck assembly to move relative to the other;
- (d) said chuck assembly including an electrically-conductive chuck assembly element having a laterally-extending surface for supporting said test device;
- (e) an electrically-conductive component extending laterally in spaced-apart relationship to said surface, at least one of said chuck assembly element and said conductive component being movable laterally with respect to the other, said conductive component defining at least one hole through which said probe can extend transversely with respect to said conductive component so that an electrical connection can be

made with said test device by said probe at different lateral relationships between said chuck assembly element and said conductive component, said probe station including an electrically conductive enclosure at least partially enclosing said chuck assembly and said conductive component, said chuck assembly element and said conductive component being separated by respective electrical insulation members from said conductive enclosure.

20(new). The probe station of claim 19 wherein said conductive component has a more extensive lateral area than does said surface.

21(new). A probe station comprising:

- (a) a chuck assembly for supporting a test device;
- (b) a probe support for supporting a probe;
- (c) a positioning mechanism enabling at least one of said probe support and said chuck assembly to move relative to the other;
- (d) said chuck assembly including an electrically-conductive chuck assembly element having a laterally-extending surface for supporting said test device;
- (e) an electrically-conductive component extending laterally in spaced-apart relationship to said surface, at least one of said chuck assembly element and said conductive component being movable laterally with respect to the other, said conductive component defining at least one hole through which said probe can extend transversely with respect to said conductive component so that an electrical connection can be made with said test device by said probe at different lateral relationships between said chuck assembly element and said conductive component, said probe station including an electrically conductive enclosure at least partially enclosing said chuck assembly and said conductive component, said conductive component being separated by at least one electrical insulation member from said conductive enclosure.

22(new). The probe station of claim 21 wherein said conductive component has a more extensive lateral area than does said surface.

23(new). A probe station comprising:

- (a) a chuck assembly for supporting a test device;
- (b) a laterally-extending probe support for supporting a probe;
- (c) a positioning mechanism enabling at least one of said probe support and said chuck assembly to move relative to the other;
- (d) said chuck assembly including an electrically- conductive chuck assembly element having a laterally-extending surface for supporting said test device;
- (e) an electrically-conductive component extending laterally in spaced-apart relationship to said surface, at least one of said chuck assembly element and said conductive component being movable laterally with respect to the other, said conductive component and said probe support each defining at least one hole through which said probe can extend transversely with respect to said conductive component and said probe support so that an electrical connection can be made with said test device by said probe at different lateral relationships between said chuck assembly element and said conductive component, said conductive component having a more extensive lateral area than does said laterally-extending surface of said chuck assembly element and being separated by at least one electrical insulation member from said probe support.--